

Physics 30

Teacher: Mr. Birrell

Room

Content

Modern Physics

- *Analyze the importance of relativistic principles and quantum mechanics in our world*
- *Assess the effects of radioactivity and nuclear technology on society and the environment*

Forces and Motion

- *Analyze motion in one- and two-dimensions, including uniform motion, uniformly accelerated motion, circular motion, and projectile motion*
- *Analyze the effects of forces on objects undergoing uniform motion, uniformly accelerated motion, circular motion, and projectile motion*

Conservation Laws

- *Investigate the nature of mechanical energy and efficiency in mechanical systems, including the law of conservation of energy*
- *Analyze the motion of objects and interactions between objects using momentum concepts, including the law of conservation of momentum*

Fields

- *Investigate gravitational fields and their interactions with matter*
- *Investigate electric and magnetic fields and their interactions with matter*

Evaluation

Semester Work:	20%
Exams:	55%
Final Exam:	25%

Helpful Things to Have

- Something to write with
- Something to write on
- Agenda
- Scientific Calculator
- Ruler and Protractor
- A working brain

Expectations

- 1) Come to class prepared.
- 2) Take notes every day.
- 3) Do daily assignments all the time.
- 4) Hand in all assignments on time.
- 5) Complete review assignments.

Late Admittance

If the door is open you are permitted to quietly enter the room and find your seat. If the door is closed knock **once** and wait for the teacher to open the door.

Missed Evaluations

Any missed evaluations are expected to be completed the day the student returns.

Unexcused absences will result in a mark of zero for any work due or completed on that day.

Resources

Class wiki: <http://mrbirrell.wikispaces.com/>

Course Finalization

9:00 – 11:00 Comprehensive written final exam.